



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: M. Winn, et al.

Serial No.: 09/653,563

Filed: August 31, 2000

Title: ENDOTHELIN ANTAGONISTS

Case No.: 5594.US.P9

Group Art No.: 1614

Examiner: (not assigned)

Date: February 20, 2001

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Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b)(3), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed, to the knowledge of the undersigned, before the mailing date of a first Office Action on the merits. Applicants respectfully petition and request that the Examiner consider the listed documents and evidence such consideration by making appropriate notations on the attached form. Copies of the listed documents are attached.

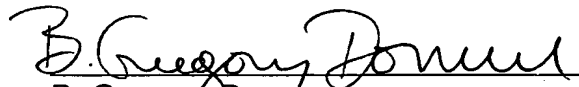
This submission does not represent that a search has been made or that no better art exists, and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

The Commissioner is authorized to charge our Deposit Account any additional fees (or credit any over payments) that may be required under 37 C.F.R. §§ 1.16 and 1.17 in association with this communication for which full payment has not been tendered.

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Respectfully submitted,
M. Winn, et al.


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COPY

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Form PTO - 1449 (Modified)

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
(Modified) PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

(37 CFR 1.98 (b))

ATTY. DOCKET NO.

5594.US.P9

SERIAL NO.

09/653,563

APPLICANT(S)

Martin Winn, et al.

FILING DATE

August 31, 2000

GROUP

1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	INVENTOR	CLASS	SUB CLASS	FILING DATE
	A1	3,342,833	09/19/67	Fremery et al.			
	A2	3,719,667	03/06/73	Gutowski			
	A3	3,840,556	10/08/74	Kukolja			
	A4	4,132,709	02/02/79	Santrouch et al.			
	A5	4,216,218	08/05/80	Ehrogott et al.			
	A6	4,340,715	07/20/82	Grounder et al.			
	A7	5,482,960	01/09/96	Berryman et al.			
	A8	5,668,164	09/16/97	Ma et al.			
	A9	5,998,468	12/07/99	Cheng et al.			
	A10	6,017,951	01/25/00	Patt et al.			
	A11	6,048,893	04/11/00	Smith et al.			

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLIC- ATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANS- LATION YES NO
	B1	0 439 444	07/31/91	EP			
	B2	2,275,926	09/14/94	GB			
	B3	93/08799	05/13/93	PCT			
	B4	94/02474	02/03/94	PCT			
	B5	94/14434	07/07/94	PCT			
	B6	95/04534	02/16/95	PCT			
	B7	95/05372	02/23/95	PCT			
	B8	95/05376	02/23/95	PCT			
	B9	95/33748	12/14/95	PCT			
	B10	95/33752	12/14/95	PCT			
	B11	95/35107	12/28/95	PCT			
	B12	96/06095	02/25/96	PCT			
	B13	97/30046	08/21/97	PCT			

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C1	Aktan et al., BQ-123, A Specific Endothelin (ETA) Receptor Antagonist, Prevents Ischemia-reperfusion Injury in Kidney Transplantation, <i>Transplant Int</i> , Vol. 9, 1996, pp. 201-207.
C2	Benigni et al., "A Specific Endothelin Subtype A Receptor Antagonist Protects Against Injury in Renal Disease Progression", <i>Kidney International</i> , Vol. 44, 1993, pp. 440-444.
C3	Berliner et al., <i>Journal of the American Chemical Society</i> , Vol. 72, 1950, pp. 222-227
C4	Berridge et al., "Lithium Amplifies Agonist-dependent Phosphatidylinositol Responses in Brain and Salivary Glands", <i>Biochem. J.</i> , Vol. 206, 1982, pp. 587-595.
C5	Bhagwat, S., "Synthesis of Enantiomerically Pure Pyrrolidinones as Endothelin Receptor Antagonists", <i>Tetrahedron Letters</i> , 37(27) , 1996, pp. 4627-4630.
C6	Bobik et al., "Growth Factor Activity of Endothelin on Vascular Smooth Muscle", <i>American Journal of Physiology</i> , Vol. 258, 1990, pp. C408-C415.



DATE: 02/20/01

SHEET 2 of 4

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C7	Bonvallet et al., <i>American Journal of Physiology</i> , Vol. 266, 1994, pp. H1327-H1331.
C8	Borch et al., "The Cyanohydridoborate Anion as a Selective Reducing Agent", <i>J. Am. Chem. Soc.</i> , Vol. 93, No. 12, 1971, pp. 2897-2904.
C9	Bourguignon et al., <i>Canadian Journal of Chemistry</i> , Vol 63, 1985, pp. 2354-2361.
C10	Bowman, <i>J. Chem. Soc.</i> , 1950, pp. 1346-1349.
C11	Bram et al., <i>Bull. Chem. Soc. France</i> , 1964, pp. 945-951.
C12	Bredereck et al., <i>Chem. Berichte</i> , Vol. 97, 1964, pp. 3397-3406.
C13	Brintzinger et al., <i>Chem. Berichte</i> , Vol. 85, 1952, pp. 455-457.
C14	Bunchman et al., "Smooth Muscle Cell Proliferation by Conditioned Media from Cyclosporine-Treated Endothelial Cells: A Role of Endothelin", <i>Transplantation Proceedings</i> , Vol. 23, No. 1, 1991, pp. 967-968.
C15	Bunting et al., <i>J. Am. Chem. Soc.</i> , Vol. 115, 1993, pp. 11705-11715.
C16	Cahiez et al., Copper-Catalyzed Conjugate Addition of Organomagnesium Reagents to α , β -Ethyleneic Esters: A Simple High Yield Procedure, <i>Tetrahedron Letters</i> , Vol. 31, No. 51, 1990, pp. 7425-7428.
C17	<i>Chemical Abstract</i> , Vol. 74, No. 9, 1971, p. 304.
C18	<i>Chemical Abstract</i> , Vol. 119, No. 21, 1993, p. 999.
C19	Chobanian et al., Antiatherogenic Effect of Captopril in the Watanabe Heritable Hyperlipidemic Rabbit, <i>Hypertension</i> , Vol. 15, No. 3, 1990, pp. 327-331.
C20	Clozel et al., Pathophysiological Role of Endothelin Revealed by the First Orally Active Endothelin Receptor Antagonist, <i>Nature</i> , Vol. 365, 1993, pp. 759-761.
C21	Corey et al., <i>Tetrahedron Letters</i> , Vol. 36, 1972, pp. 3769-3772.
C22	Cottrell et al., <i>J. Chem. Soc., Perkin Trans. 1</i> , Vol. 5, 1991, pp. 1091-1097.
C23	Craig et al., "Modern Pharmacology, Third Edition", LITTLE, BROWN AND COMPANY, BOSTON, US, page 33, column 2 – page 35, column 1
C24	Ferro et al., The Clinical Potential of Endothelin Receptor Antagonists in Cardiovascular Medicine, <i>Drugs</i> , Vol. 51, No. 1, 1996, pp. 12-27.
C25	Foegh et al., "Inhibition of Coronary Artery Transplant Atherosclerosis in Rabbits with Angiopeptin, an Octapeptide", <i>Atherosclerosis</i> , Vol. 78, 1989, pp. 229-236.
C26	Fung et al., "Nonpeptide Renin Inhibitors Employing a Novel 3-Aza (or oxa)-2,4-dialkyl Glutaric Acid Moiety as a P2/P3 Amide Bona Replacement", <i>J. Med. Chem.</i> , Vol. 35, No. 10, 1992, pp. 1722-1734.
C27	Ge, et al., <i>Yaoxue Xuebao</i> , <u>20</u> 427-432 (1985)
C28	Gershon et al., <i>J. Heterocyclic Chem.</i> , Vol. 24, 1987, pp. 205-209.
C29	Greene et al., "Protective Groups in Organic Synthesis", 2 nd Ed., 1991, pp. 152-186.
C30	Gupton et al., <i>Synthetic Communications</i> , Vol. 12, No. 1, 1982, pp. 35-41.
C31	Hara et al., Amelioration of Brain Damage after Focal Ischemia in the Rat by a Novel Inhibitor of Lipid Peroxidation, <i>European J. Pharmacol.</i> , Vol. 197, 1991, pp. 75-82.
C32	Hatt, <i>Journal of the Chemical Society</i> , Vol. 132, 1929, pp. 1623-1632.
C33	Heistad et al., <i>Circulation Research</i> , Vol. 54, No. 6, 1984, pp. 711-718.
C34	Higuchi et al., "Pro-drugs as Novel Delivery Systems", A.C.S. Symposium Series, <i>American Chemical Society</i> , Vol. 14, (1975).
C35	Hirata et al., <i>Biochem. Biophys. Res. Commun.</i> , Vol. 154, No. 3, 1988, pp. 868-875.
C36	Hogaboam et al., An Orally Active Non-selective Endothelin Receptor Antagonist, Bosentan, Markedly Reduces Injury in a Rat Model fo Colitis, <i>European J. Pharmacol.</i> , Vol. 309, 1996, pp. 261-269.

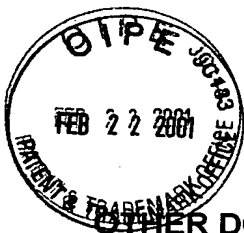


DATE: 02/20/01

SHEET 3 of 4

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C37	Hoshino et al., A Convenient Preparation of Certain N,N-Dialkylcarbamoyl Chlorides , <i>Synthetic Communications</i> , Vol. 17, No. 16, 1987, pp. 1887-1892.
C38	Hudlicky et al., <i>Synthetic Communications</i> , Vol. 16, No. 2, 1986, pp 169-182.
C39	Imbriaco et al., <i>Clinical Cancer Research</i> , Vol. 4, 1998, pp. 1765-1772.
C40	Ishida et al., <i>Biochem. Pharmacol.</i> , Vol. 44, No. 7, 1992, pp. 1431-1436.
C41	Itoh et al., <i>Biochemical and Biophysical Research Communications</i> , Vol. 195, No. 2, 1993, pp. 969-975.
C42	Itoh et al., <i>FEBS Letters</i> , Vol. 231, No. 2, 1988, pp. 440-444.
C43	"IUPAC 1974 Recommendations for Section E, Fundamental Stereochemistry", <i>Pure Appl. Chem.</i> , Vol. 45, pp. 13-30 (1976).
C44	Jae, et al., "Pyrrolidine-3-carboxylic acids as Endothelin Antagonists. 2. Sulfonamide-Based ETA-ETB Mixed Antagonists." <i>JOURNAL OF MEDICINAL CHEMISTRY</i> , Vol. 40, No. 20, 1997, pp. 3217-3227.
C45	Kaldor et al., "A Mild, Osmium Tetraoxide-Catalyzed Method for the Oxidation of Sulfides to Sulfones", <i>Tetrahedron Letters</i> , Vol. 32, No. 38, 1991, pp. 5043-5046.
C46	Kanemasa et al., "Nonstabilized Azomethine Ylides Generated by Decarboxylative Condensation of α -Amino Acids. Structural Variation, Reactivity, and Stereoselectivity", <i>Bull. Chem. Soc. Of Japan</i> , Vol. 62, No. 6, 1989, pp. 1960-1968.
C47	Klemm et al., Endothelin 1 Mediates ex vivo Coronary Vasoconstriction Caused by Exogenous and Endogenous Cytokines , <i>Proc. Natl. Acad. Sci.</i> , Vol. 92, 1995, pp. 2691-2695.
C48	Kon et al., Glomerular Actions of Endothelin In Vivo , <i>J. Clin. Invest.</i> , Vol. 83, 1989, pp. 1762-1767.
C49	Kon et al., Role of Endothelin in Cyclosporine-induced Glomerular Dysfunction , <i>Kidney International</i> , Vol. 37, 1990, pp. 1487-1491.
C50	Krapcho et al., <i>Organic Syntheses</i> , Vol. 47, 1967, pp. 20-23.
C51	Margulies et al., <i>Circulation</i> , Vol. 82, No. 6, 1990, pp. 2226-2230.
C52	Matsumura et al., <i>European Journal of Pharmacology</i> , Vol. 185, 1990, pp. 103-106.
C53	Matsumura et al., <i>Life Sciences</i> , Vol. 49, 1991, pp. 841-848.
C54	McMurdo et al., <i>European Journal of Pharmacology</i> , Vol. 259, 1994, pp. 51-55.
C55	Nakagomi et al., <i>J. Neurosurg.</i> , Vol. 66, 1987, pp. 915-923.
C56	Nelson et al., <i>Nature Medicine</i> , Vol. 1, No. 9, 1995, pp. 944-949.
C57	Nelson et al., <i>Urology</i> , Vol. 53, No. 5, 1999, pp. 1063-1069.
C58	Potvin et al., <i>Canadian Journal of Physiol. And Pharmacol.</i> , Vol. 67, 1989, pp. 1213-1218.
C59	Prescott, ed., <i>Methods in Cell Biology</i> , Vol. XIV, pp. 33 et seq., Academic Press, New York, NY (1976).
C60	Rahman, <i>Indian J. Chem.</i> , Sec B, 19B 828-830 (1980)
C61	Rapoport et al., <i>J. Org. Chem.</i> , 1986, Vol. 51, pp. 5106-5110.
C62	Roche, E.B, Editor., "Bioreversible Carriers in Drug Design: Theory and Application", pp. 13-21, Pergamon Press, New York (1987).
C63	Seydal et al., "ChemiStruktur und biologische Aktivitat von Wirkstoffen." VERLAG CHEMIE, WEINHEIM, DE, 1979, page 124, paragraph 2 -page 126, paragraph 2.
C64	Shichiri et al., <i>J. Clin. Invest.</i> , Vol. 87, 1991, pp. 1867-1871.
C65	Streitwieser et al., <i>Tetrahedron Letters</i> , Vol. 42, 1971, pp. 3927-3930.
C66	Takahashi et al., <i>Clinical Science</i> , Vol 79, 1990, pp. 619-623.
C67	Tasker, et al., "Potent and Selective Non-Benzodioxole Containing Endothelin- A Receptor Antagonists" 1997, <i>JOURNAL OF MEDICINAL CHEMISTRY</i> .
C68	Taylor et al., <i>J. Org. Chem.</i> , Vol. 54, 1989, pp. 3618-3624.



DATE: 02/20/01

SHEET 4 of 4

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

C69	Topliss, "Quantitative Structure-Activity Relationships of Drugs", ACADEMIC PRESS, NEW YORK, page 453, paragraph 2 – page 456, paragraph 2
C70	Tsuge, et al. Chemistry Letters, 801-804 (1984)
C71	Tsuge, et al. Bull. Chem. Soc. Jpn <u>59</u> 2537 (1986)
C72	Tsuge et al., <i>Chemistry Letters</i> , 1983, pp. 1131-1134.
C73	Tsuge et al., <i>J. Org. Chem.</i> , 1987, Vol. 52, pp. 2523-2530.
C74	U.S. Department of Health and Human Services. "Management of Cancer Pain Clinical Guideline Number 9." AHCPR Publication No. 94-0592: March 1994.
C75	Vilsmaier et al., <i>Liebigs Ann. Chem.</i> , 1980, pp. 1055-1063.
C76	Wallace et al., <i>Am. J. Physiol.</i> , 1989, Vol. 256, pp. G661-G666.
C77	Watanabe et al., <i>Nature</i> , Vol. 344, 1990, pg. 114.
C78	Weaver et al., <i>J. Amer. Chem. Soc.</i> , Vol. 69, 1947, pp. 515-516.
C79	Wenkert et al., <i>J. Org. Chem.</i> , Vol. 48, 1983, pp. 5006-5009.
C80	Winn, et al., "2.4-Diarylpyrrolidine-3-carboxylic Acids-Potent Et _A Selective Endothelin Receptor Antagonists. 1. Discovery of A-127722.", <i>Journal of Medicinal Chemistry</i> , Vol. 39, No. 5, 1996, pp. 1039-1048.
C81	Wu-wong et al., <i>Life Sciences</i> , Vol. 58, No. 21, 1996, pp. 1839-1847.
C82	Yamagishi et al., <i>Biochem. Biophys. Res. Comm.</i> , Vol. 191, No. 3, 1993, pp. 840-846.
C83	Yamamoto et al., <i>J. Pharmacol. Exp. Therapeutics</i> , Vol. 271, 1994, pp. 156-163.
C84	Yanagisawa et al., <i>Nature</i> , Vol. 332, 1988, pp. 411-415.
C85	U. S. Patent Application Serial No. 09/634,661, filed August 7, 2000.
C86	U. S. Patent Application Serial No. 09/048,955, filed March 27, 1998.
C87	U. S. Patent Application Serial No. 08/794,506, filed February 4, 1997.
C88	U. S. Patent Application Serial No. 08/600,625, filed February 13, 1996.
C89	U. S. Patent Application Serial No. 08/497,998, filed August 2, 1995.
C90	U. S. Patent Application Serial No. 08/442,575, filed May 30, 1995.
C91	U. S. Patent Application Serial No. 08/334,717, filed November 4, 1994.
C92	U. S. Patent Application Serial No. 08/293,349, filed August 19, 1994.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Form PTO 1449)